

Translation

PATENT COOPERATION TREATY

PCT/EP2003/011546



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2148/Dr.BrM/	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2003/011546	International filing date (day/month/year) 18 October 2003 (18.10.2003)	Priority date (day/month/year) 19 December 2002 (19.12.2002)
International Patent Classification (IPC) or national classification and IPC C09D 4/06		
Applicant RÖHM GMBH & CO. KG		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 4 sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 05 February 2004 (05.02.2004)	Date of completion of this report 17 March 2005 (17.03.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2003/011546

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-31 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 22 _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ 1-21 _____ received by this Authority on 14 December 2004 (14.12.2004)
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/11546

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following documents:

D1: EP-A-0 730 011 (ROEHM GMBH) 4 September 1996 (1996-09-04), mentioned in the application

D2: EP-A-0 628 614 (ROEHM GMBH) 14 December 1994 (1994-12-14), mentioned in the application

1. Novelty

The present application appears to satisfy the requirements of PCT Article 33(2) because the subject matter of claims 1-21 is novel with respect to the available documents.

2. Inventive Step

The present application does not satisfy the requirements of PCT Article 33(3) because the subject matter of claims 1-21 does not involve an inventive step.

2.1.

Document D1, which is considered the closest prior art, discloses a coating agent for scratch-resistant coatings of plastic bodies, consisting of (page 3, lines 14-27):

- (1) 1-30 percent by weight of a polymerizable prepolymer as a thickening agent obtainable by radical polymerization of
 - 1a) 90 to 99 percent by weight C1 to C8 alkyl esters of acrylic or methacrylic acid and
 - 1b) 1 to 10 percent by weight of a sulfur regulator with at least three thiol groups
- (2) 20 to 80 percent by weight of multifunctional acrylates and/or multifunctional methacrylates
- (3) 5 to 75 percent by weight of a diluting agent
- (4) 0.01 to 10 percent by weight of a UV initiator
- (5) 0 to 20 percent by weight of conventional additives, particularly UV absorbers,

from which the subject matter of claim 1 differs in that 2,2,3,3-tetrapropyl methacrylate is contained as fluoralkyl (meth)acrylate, with only four fluorine atoms in the alcohol residue (page 5, line 19). The applicant has not demonstrated that the differentiating feature is the cause of the technical effect. For this reason, the technical problem can be seen only as that of preparing a further fluoralkyl (meth)acrylate in a coating agent for producing scratch-resistant coatings. Document D2 (page 3, lines 4-19) describes, as a differentiating feature, the use of (meth)acrylates with $\text{CH}_2\text{-CH}_2\text{-(CF}_2\text{CF}_2)_n\text{F}$ fluoric alcohol residues, such as 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluoro decyl acrylate and 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,19,19,20,20,20-heptatriacontafluoro eicosyl acrylate in a coating agent for scratch-resistant coatings of plastic bodies (page 4, lines 54-56).

A person skilled in the art, proceeding from D1 in order to find an alternative fluoralkyl (meth)acrylate for coating agents for scratch-resistant coatings of plastic bodies, would find indications in document D2 of the solution to this general problem, i.e. said person would arrive at an alternative by incorporating the fluoralkyl (meth)acrylates disclosed in D2.

Therefore, an inventive step cannot be acknowledged for claim 1.

2.2.

Moreover, the subject matter of claims 2-21 is disclosed in document D1.

Therefore, no inventive step with respect to documents D1 and D2 can be acknowledged for the subject matter of claims 2-21.